

SUSTAINABLE CITIES AND RESILIENT INFRASTRUCTURE



SUSTAINABLE CITIES AND RESILIENT INFRASTRUCTURE

Supporting the development of inclusive, resilient, and sustainable urban environments. Our expertise includes affordable housing, water and sanitation systems, urban planning, infrastructure reforms, and resilient city development.

OUR EXPERTISE



**AFFORDABLE HOUSING
SOLUTIONS**



**WATER AND WASTE
MANAGEMENT**



**URBAN PLANNING
AND REFORMS**



AFFORDABLE HOUSING SOLUTIONS

Advancing inclusive and affordable housing through needs assessments, innovative financing, and sustainable housing models that strengthen community resilience.

Study on Housing Provision for Forcibly Displaced Persons

 2025  Kenya, Uganda, Ethiopia  International Finance Corporation (IFC)

Forced displacement across East Africa has increased the demand for safe, affordable, and sustainable housing solutions. Commissioned by the International Finance Corporation (IFC), the study assesses the housing needs of forcibly displaced populations (FDPs) in Kenya, Uganda, and Ethiopia, focusing on identifying inclusive housing and settlement models that strengthen resilience, improve living conditions, and support social integration in refugee-hosting areas and urban areas.



ASSESSING HOUSING NEEDS

Conducting field research and data collection across refugee camps, refugee-hosting areas, and urban settlements to understand housing demand and existing gaps.



EVALUATING HOUSING FINANCE DEMAND

Analysing the demand for housing finance solutions to improve access to affordable and sustainable housing for displaced populations.



IDENTIFYING SUSTAINABLE HOUSING MODELS

Developing context-specific housing approaches that promote improved living conditions, social integration, and long-term resilience for both forcibly displaced populations and host communities.



WATER AND WASTE MANAGEMENT

Improving access to resilient water and sanitation systems through sustainable infrastructure, integrated resource management, and climate-responsive solutions.

Development of Water Infrastructure Design Guidelines and Standards



2024-2025



South Sudan



The World Bank

South Sudan is increasingly vulnerable to recurrent flooding and climate-related disasters, underscoring the need for resilient water infrastructure. This project supported the Ministry of Water Resources and Irrigation (MWRI) in developing climate-resilient water infrastructure design guidelines and technical standards to strengthen disaster risk management and enhance flood resilience.



DEVELOPING CLIMATE-RESILIENT DESIGN STANDARDS

Preparing technical guidelines and recommendations for resilient water infrastructure based on global best practices.



STRENGTHENING INSTITUTIONAL CAPACITY

Supporting the integration of climate resilience into water infrastructure planning, design, and development.



PROVIDING TECHNICAL & STRATEGIC ADVISORY

Delivering technical support informed by regional experience in integrated water resources management, urban resilience, and World Bank-supported infrastructure programmes.



Complete Design for the Kule & Tierkidi Refugee Camps Piped Water Supply Project in Gambella



2014-2015



Ethiopia

Access to reliable and safe water is critical for improving health and living conditions in humanitarian settings. This project supported the design of a piped water supply system to provide clean and safe potable water for approximately 160,000 South Sudanese refugees residing in the Kule and Tierkidi refugee camps in Ethiopia.



DESIGNING THE WATER SUPPLY SYSTEM

Preparing the detailed design of the piped water distribution network to ensure reliable access to safe drinking water.



PLANNING WATER POINT INFRASTRUCTURE

Identifying appropriate water point infrastructure to support efficient and equitable water distribution across the refugee camps.



COORDINATING IMPLEMENTATION

Working with UNICEF, UNHCR, IRC, World Vision, and other partners to support the implementation of the water supply system.

160,000

South Sudanese refugees targeted to benefit from improved access to clean and safe potable water

URBAN PLANNING AND REFORMS

Advancing sustainable urban development through climate-responsive planning, infrastructure investment, institutional reforms, and evidence-based solutions for resilient cities.

Regional Masterplan Development for Water, Energy, Transport and ICT



2018-2019



Ethiopia, Kenya, Djibouti, Somalia, Sudan, South Sudan, Uganda



IGAD (Intergovernmental Authority on Development) Secretariat and African Development Bank (AfDB)

Regional infrastructure is critical to strengthening economic integration, improving connectivity, and unlocking trade across the Horn of Africa. This project supported the development of the **IGAD Regional Infrastructure Masterplan** to enhance cross-border connectivity, promote regional integration, and drive inclusive and sustainable economic growth across the IGAD region.



CONDUCTING REGIONAL INFRASTRUCTURE ASSESSMENTS

Undertaking infrastructure and macroeconomic assessments across the transport, energy, water, and ICT sectors.



DEVELOPING AN INVESTMENT ACTION PLAN

Preparing an Action Plan for priority infrastructure investments and policy initiatives to guide implementation.



SUPPORTING INVESTMENT MOBILISATION

Engaging investors to strengthen project bankability and implementation readiness.



PRIORITISING STRATEGIC INFRASTRUCTURE INVESTMENTS

Prioritising Transboundary Infrastructure and Regional Economic Corridors

Mobilising Investment for NDC Implementation - Understanding the Ethiopian Regulatory Environment in Relation to Mini-Grids



2018-2019



Ethiopia



International Climate Initiative

Mobilising private capital is essential to achieving Ethiopia's climate commitments and accelerating the transition to a low-carbon economy. This project supported the creation of an enabling environment for private-sector investment in Nationally Determined Contribution (NDC) implementation by addressing institutional barriers, de-risking investments, and strengthening climate finance readiness to scale up climate-aligned financing.



ASSESSING CLIMATE FINANCE READINESS

Conducting a comprehensive assessment to support the development of an investment platform and project pipeline aligned with the Ethiopia IKI MI workplan.



IDENTIFYING INSTITUTIONAL & CAPACITY GAPS

Assessing constraints within the Ethiopian Energy Authority (EEA), Ethiopian Electric Utility (EEU), and other key stakeholders that limit access to climate finance and the development of bankable low-carbon energy projects.



DEVELOPING DE-RISKING & FINANCING SOLUTIONS

Providing technical guidance on the design of de-risking instruments and innovative off-grid financing and business models to improve the commercial viability of mini-grid projects.



Diagnostic Work for Climate Resilient Urban Development



2025



Somalia



The World Bank

Led by Triple Line in consortium with HKV and Raagsan, this project delivers city-level flood risk and climate resilience diagnostics for Mogadishu and Hargeisa to strengthen urban resilience, improve flood risk management, and support climate-responsive urban planning.



FLOOD RISK & CLIMATE MODELLING

Developed flood hazard and risk models under current and future climate scenarios to assess climate impacts and inform resilience planning.



RESILIENCE PLANNING

Identified and prioritised structural and non-structural mitigation measures and prepared city-specific resilience roadmaps and investment strategies.



URBAN RISK ASSESSMENTS

Analysed urban growth, land use, and critical asset exposure, complemented by household and business surveys in flood-prone communities.



INSTITUTIONAL STRENGTHENING & STAKEHOLDER ENGAGEMENT

Assessed institutional capacities and facilitated stakeholder engagement to support the implementation of climate-resilient urban solutions and future investment planning.

Transport and Logistics Sector Climate Change Scoping Study for Development of a Green Logistics Action Plan



2024



Northern Corridor (Kenya, Uganda, Rwanda, DRC, South Sudan)



TradeMark Africa (TMA)

The project supports the transition to greener and more efficient trade and transport systems along the Northern Corridor by updating baseline greenhouse gas (GHG) emissions estimates and identifying practical low-carbon interventions across the grains and fisheries value chains. Implemented in partnership with the Kenya Climate Innovation Centre, the assignment aims to improve climate outcomes while enhancing business efficiency and food security.



GHG EMISSIONS ASSESSMENT

Updated baseline greenhouse gas emissions estimates for the Northern Corridor to establish a robust evidence base for climate action.



LOGISTICS & TRANSPORT DIAGNOSTICS

Assessed logistics and transport systems to identify opportunities for reducing emissions and improving operational efficiency.



LOW-CARBON ACTION PLANNING

Developed a costed Action Plan outlining practical interventions to reduce transport costs, improve climate outcomes, and strengthen food security across the corridor.



Green Cities and Infrastructure Programme (GCIP) Ghana Urban Work Package

 2024-2026

 Ghana

 FCDO- PwC

The project supports climate-resilient and inclusive urban development in Ghana through technical assistance under the FCDO-funded Green Cities and Infrastructure Programme (GCIP). Implemented as part of a PwC-led consortium, the assignment strengthens urban resilience, enhances adaptive capacity, and helps unlock climate and development finance for priority urban infrastructure investments.



CLIMATE INVESTMENT PREPARATION

Prepared detailed feasibility studies to mobilise climate and development finance for improving water security in Wa Municipality and strengthening flood resilience in the Sekondi Takoradi Metropolitan Assembly (STMA).



URBAN DATA & RISK ANALYTICS

Developed urban data systems and climate risk mapping methodologies to support evidence-based decision-making.



CLIMATE-RESPONSIVE URBAN PLANNING

Delivered planning tools to improve climate-responsive urban planning, service delivery, and infrastructure prioritisation across municipalities in Ghana.

URBAN PLANNING AND REFORMS



Detailed Design, Tender Document Preparation, Contract Administration and Construction Supervision of the Bole-Lemi Phase II and Kilinto Industrial Zones

 2015-2018

 Ethiopia

 Ministry of Industry and The World Bank

The project supported the development of Bole Lemi Phase II and Kilinto Industrial Parks in Ethiopia through detailed engineering design and construction supervision for on-site and off-site infrastructure. The assignment aimed to deliver high-quality industrial infrastructure to support manufacturing growth, investment, and economic development.



ENGINEERING DESIGN & INFRASTRUCTURE PLANNING

Prepared detailed engineering designs for serviced land, factory sheds, and commercial, administrative, and social service infrastructure.



CONSTRUCTION DOCUMENTATION

Developed Bills of Materials (BOMs), cost estimates, technical specifications, and bid documents to support procurement and implementation.



CONSTRUCTION SUPERVISION & CONTRACT MANAGEMENT

Oversaw construction works and contract administration to ensure quality, compliance, and timely delivery of infrastructure.

Climate Compatible Urban Industrial Project Development and Investment Plan



2017



Ethiopia



Climate and Development Knowledge Network

The project supports green urban-industrial development in Ethiopia by identifying climate-compatible and investment-ready opportunities along the Kombolcha-Mekelle Industrial Corridor. The assignment aims to promote resilient industrial growth while informing the Government of Ethiopia's investment priorities and implementation strategies.



STAKEHOLDER ENGAGEMENT & DATA COLLECTION

Engaged key stakeholders and collected local data to assess development needs and opportunities across the industrial corridor.



GREEN GROWTH ASSESSMENTS

Evaluated opportunities and challenges for climate-resilient and sustainable industrial development.



PROJECT PRIORITISATION & INVESTMENT PLANNING

Identified catalytic green growth projects and undertook pre-feasibility analyses to support financing and implementation strategies.

Urban Local Government Development Project (ULGDP) - Implementation Completion Report (End of the Programme Evaluation)



2014-2015



Ethiopia



Ministry of Urban Development and The World Bank

The project strengthens the institutional capacity of Urban Local Governments (ULGs) in Ethiopia to improve the delivery of urban infrastructure and basic services through performance-based grant financing. The assignment evaluated the Urban Local Government Development Programme (ULGDP) to inform its scale-up and enhance the effectiveness of urban investments across the country.



PROGRAMME EVALUATION

Assessed the Urban Local Government Development Programme (ULGDP) across 19 cities using the OECD DAC evaluation criteria.



INSTITUTIONAL & CAPACITY ASSESSMENT

Evaluated local government capacity for capital investment planning, implementation, and resource mobilisation.



PROGRAMME SCALE-UP STRATEGY

Developed recommendations to support the expansion of ULGDP II and strengthen the delivery of urban infrastructure and services in additional cities.





ABOUT US

Committed to advancing Africa's bold vision

We are a wholly owned subsidiary of the IPE Global Group, an international development consulting firm, blending global expertise with on-the-ground experience.

Drawing on 27+ years of expertise, we deliver scalable, evidence-based solutions across Africa, strengthening local capacity and supporting national development priorities.

INTERNATIONAL LOCATIONS

New Delhi, India (HQ) | Phnom Penh, Cambodia | Addis Ababa, Ethiopia | Hamburg, Germany | Nairobi, Kenya | Manila, Philippines | London, United Kingdom

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